



ST96042Asqlt.txt
SEQUENCE LISTING

RECEIVED
OCT 12 2001
TECH CENTER 1600/2900

<110> ICARD-LIEPKALNS, Christine
MALLET, Jacques
RAVASSARD, Philippe

<120> POLYPEPTIDES OF THE "BASIC-HELIX-LOOP-HELIX" bHLH
FAMILY, CORRESPONDING NUCLEIC ACID SEQUENCES

<130> ST96042A-US

<140> US 09/595,947

<141> 2000-06-16

<150> FR96/15651

<151> 1996-12-19

<150> PCT/FR97/02368

<151> 1997-12-19

<160> 28

<170> PatentIn Ver. 2.1

<210> 1

<211> 1460

<212> DNA

<213> Rattus norvegicus

<400> 1

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cgattagcag ctcagaagtc cctctgggtc tcaccactgc acagaggccg aggaccccct 180
ccgagcttct ttgctgcctc cagacgcaat ttactccagg cgagggcgcc tgcagctcag 240
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gcagctctct gttcttttga gcccggagta actaggtaac atttaggaac ctccaaaggg 360
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actgtcacac cccccttcca ttttttccca acctcaggat ggcgcctcat cccttggatg 480
cgcccacccat ccaagtgtcc caagagaccc agcaaccctt tcccggagcc tcggaccacg 540

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aagcagaagc aggtgactgc cgagggacat cgaggaagct ccgtgctgcgg cgcggagggc 660
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ccaacgaccg ggagcgcaac cgcattgcaca accttaactc cgcgctggat gcgctgctcg 780
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Sub
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cccttctggc ttctattagt caggtccctg atttaaccag gattcgcaaca gttccttgct 1260
Al
W
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agagtgcact aatccagtgt 1460

<210> 2

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR Primer

<220>

<223> n = Inosine

<400> 2

aatkmgmgng agcgndkcg cryg

<210> 3
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primers

Sub
B1
<400> 3
ggcsrdtytc agggtsybga yctt

24

<210> 4
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primers

<400> 4
aaccttaact ccgcgctgga tgcgc

25

A1
W
<210> 5
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primers

<400> 5
cgcggtgtcc tgcccacc

18

<210> 6
<211> 6
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: E box

<400> 6
caggtg

6

<210> 7
<211> 6
<212> DNA
<213> Artificial Sequence<220>
<223> Description of Artificial Sequence: Mutated E box<400> 7
tccgtg

6

<210> 8
<211> 214
<212> PRT
<213> Rattus norvegicus<400> 8
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1 5 10 15Thr Gln Gln Pro Phe Pro Gly Ala Ser Asp His Glu Val Leu Ser Ser
20 25 30Asn Ser Thr Pro Pro Ser Pro Thr Leu Val Pro Arg Asp Cys Ser Glu
35 40 45Ala Glu Ala Gly Asp Cys Arg Gly Thr Ser Arg Lys Leu Arg Ala Arg
50 55 60Arg Gly Gly Arg Asn Arg Pro Lys Ser Glu Leu Ala Leu Ser Lys Gln
65 70 75 80Arg Arg Ser Arg Arg Lys Lys Ala Asn Asp Arg Glu Arg Asn Arg Met
85 90 95His Asn Leu Asn Ser Ala Leu Asp Ala Leu Arg Gly Val Leu Pro Thr
100 105 110

Phe Pro Asp Asp Ala Lys Leu Thr Lys Ile Glu Thr Leu Arg Phe Ala

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115

120

125

His Asn Tyr Ile Trp Ala Leu Thr Gln Thr Leu Arg Ile Ala Asp His
130 135 140

Ser Phe Tyr Gly Pro Glu Pro Pro Val Pro Cys Gly Glu Leu Gly Ser
145 150 155 160

Pro Gly Gly Gly Ser Ser Gly Asp Trp Gly Ser Ile Tyr Ser Pro Val
165 170 175

Ser Gln Ala Gly Ser Leu Ser Pro Thr Ala Ser Leu Glu Glu Phe Pro
180 185 190

Gly Leu Gln Val Pro Ser Ser Pro Ser Cys Leu Leu Pro Gly Thr Leu
195 200 205

Val Phe Ser Asp Phe Leu
210

<210> 9

<211> 1330

<212> DNA

<213> Homo sapiens

<400> 9

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cgctgcagc tcagctgaac ttggcgacca gaagcccgct gagctcccca cgccctcgc 120

tgctcatcgc tctctattct tttgcgccgg tagaaaggta atattggag gccttcgagg 180

gacgggcagg ggaaagagg atcctctgac ccagcggggg ctgggaggat ggctgttttt 240

gttttttccc acctagcctc ggaatcgccg actgcgccgt gacggactca aacttaccct 300

tccctctgac cccgccgtag gatgacgcct caaccctcgg gtgcgccac tgtccaagtg 360

acccgtgaga cggagcggtc cttccccaga gcctcggaag acgaagtgac ctgccccacg 420

tccgccccgc ccagccccac tcgcacaccg gggaactgcg cagaggcgga agagggaggc 480

tgccgagggg ccccgaggaa gctccgggca cggcgcgggg gacgcagccg gcctaagagc 540

gagttggcac tgagcaagca gcgacggagt cggcgaaaga aggccaacga ccgcgagcgc 600

aatcgaatgc acgacctcaa ctcggcactg gacgcctcgc gcggtgtcct gccaccttc 660

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ccagacgacg cgaagctcac caagatcgag acgctgcgct tcgcccacaa ctacatctgg 720
 gcgctgactc aaacgctgcg catagcggac cacagcttgt acgcgctgga gccgccggcg 780
 ccgcactgcg gggagctggg cagcccagge ggtccccccg gggactgggg gtccctctac 840
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 ctgctggggg ccacctcttc cgctgcttg agcccaggca gtctggcttt ctcagatttt 960
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 gccgggagcc gtagagggtg gccgacggcg gcggccctca aaagcacttg ttccttctgc 1080
 ttctccctag ctgacctctg gccggcccag gcctccacgg gggcggtagg ctgggttcat 1140
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 gcattgcaaa gtgcgctcat tttaggcctc ctctctgcca ccacccata atcccattca 1260
 aagaatacta gaatggtagc actaccggc cggagccgcc caccgtcttg ggtcgcccta 1320
 cctcactca 1330

<210> 10
 <211> 214
 <212> PRT
 <213> Homo sapiens

<400> 10

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Thr	Glu	Arg	Ser	Phe	Pro	Arg	Ala	Ser	Glu	Asp	Glu	Val	Thr	Cys	Pro
			20					25					30		
Thr	Ser	Ala	Pro	Pro	Ser	Pro	Thr	Arg	Thr	Pro	Gly	Asn	Cys	Ala	Glu
		35					40					45			
Ala	Glu	Glu	Gly	Gly	Cys	Arg	Gly	Ala	Pro	Arg	Lys	Leu	Arg	Ala	Arg
	50					55					60				
Arg	Gly	Gly	Arg	Ser	Arg	Pro	Lys	Ser	Glu	Leu	Ala	Leu	Ser	Lys	Gln
65					70					75					80

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Arg Arg Ser Arg Arg Lys Lys Ala Asn Asp Arg Glu Arg Asn Arg Met
 85 95

His Asp Leu Asn Ser Ala Leu Asp Ala Leu Arg Gly Val Leu Pro Thr
 100 105 110

Phe Pro Asp Asp Ala Lys Leu Thr Lys Ile Glu Thr Leu Arg Phe Ala
 115 120 125

His Asn Tyr Ile Trp Ala Leu Thr Gln Thr Leu Arg Ile Ala Asp His
 130 135 140

Ser Leu Tyr Ala Leu Glu Pro Pro Ala Pro His Cys Gly Glu Leu Gly
 145 150 155 160

Ser Pro Gly Gly Pro Pro Gly Asp Trp Gly Ser Leu Tyr Ser Pro Val
 165 170 175

Ser Gln Ala Gly Ser Leu Ser Pro Ala Ala Ser Leu Glu Glu Arg Pro
 180 185 190

Gly Leu Leu Gly Ala Thr Ser Ser Ala Cys Leu Ser Pro Gly Ser Leu
 195 200 205

Ala Phe Ser Asp Phe Leu
 210

Sub
B1

AI
W

<210> 11
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR Primer

<400> 11
 caacgaccgg cagcgcaa

18

<210> 12
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: PCR Primer

<400> 12
gccagatgt agttgtgggc gaag

24

<210> 13
<211> 60
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

Sub
pl
<400> 13
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<210> 14
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

Al
Wf
<400> 14
agacgacgcg aagctcacca

20

<210> 15
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<400> 15
gctcaccaag atcgagacgc tgcg

24

<210> 16
<211> 25
<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR Primer

<400> 16

atcggttgaga ctcgtaccag cagag

25

<210> 17

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR Primer

<400> 17

tcgtaccagc agagtcacga gagag

25

<210> 18

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR Primer

<400> 18

ctgccagcct gggagactg

19

<210> 19

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: PCR Primer

<400> 19

ctgcatctat ctaatgctcc tctcgctacc tgctcactct gcgtgacatc

50

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<210> 20
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<400> 20
gatgtcacgc agagtgagca ggtag

25

Sub
B1
<210> 21
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<400> 21
agcctgggag actggggagt aga

23

AI
wf
<210> 22
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<400> 22
agagtgagca ggtagcgaga ggag

24

<210> 23
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<400> 23
cgctatgcgc agcgtttgag tc 22

<210> 24
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<400> 24
cctcgaccc cattctctct tcttt 25

Sub
p1

<210> 25
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: PCR Primer

<400> 25
tgagtgaggg tagggcgacc caag 24

Al
Cut

<210> 26
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Probe

<400> 26
aggaagctcc gggca 15

<210> 27
<211> 1381
<212> RNA
<213> Artificial Sequence

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<220>

<223> Description of Artificial Sequence: Probe

<400> 27

gggcgaauug ggcccgcacgu cgcaugcucc cggccgccau ggccgcggga uuugagugag 60
 gguagggcga cccaagacgg ugggcggcuc cggccgggua gugcuaccu ucuaguauuc 120
 uuugaauugg auuauggggu gguggcagag aggaggccua aaugagcgc acuuugcaau 180
 gcccacuucg cgcgggcagc agcaaggguu gcgugcguug gcgcggcucg gagggccggg 240
 gaaugaaccc agccuaccgc ccccguggag gccugggccg gccagggguc agcuaggag 300
 aagcagaagg aacaagugcu uuugagggcc gccggcgucg gccaccucuc acggcucccg 360
 gcuccucucc ucucccuuac ccuagcacc cacagcccag cgacagacag guccuuucac 420
 agaaaaucug agaaagccag acugccuggg cucaagcagg cggaagaggu ggcccccagc 480
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 gcccagaugu aguugugggc gaagcgcagc gucucgauc uggugagcuu cgcgucgucu 720
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g 1381

<210> 28

<211> 1427

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Probe

<400> 28

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uuccaggcgg gggcgccugc agcucagcug aacuuggcga ccagaagccc gcugagcucc 180

ccacggcccu cgcugcucau cgcucucuauc uuuuuugcgc cgguagaaag guaaauuuug 240

gaggccuucg agggacgggc aggggaaaga gggauccucu gaccagcgg gggcugggag 300

gauggcuguu uuuguuuuuu cccaccuagc cucggaauug cggacugcgc cgugacggac 360

ucaaacuuauc ccuucccucu gaccccgccg uaggauagc ccucaaccu cgggugcgcc 420

cacuguccaa gugaccgug agacggagcg guccuucccc agagccucgg aagacgaagu 480

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ggaagaggga ggcugccgag gggccccgag gaagcuccgg gcacggcgcg ggggacgcag 600

ccggccuaag agcgaguugg cacugagcaa gcagcgacgg agucggcgaa agaaggccaa 660

cgaccgcgag cgcaaucgaa ugcacgaccu caacucggca cuggacgccc ugcgcggugu 720

ccugcccacc uucccagacg acgcgaagcu caccaagauc gagacgcugc gcuucgcccc 780

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auaaucccau ucaaagaaua cuagaauggu agcacuaccc ggccggagcc gccaccguc 1380

uugggucgcc cuaccucac ucaaaucgaa uucccgcggc cgccaug 1427